

Notice of Allowability	Application No.	Applicant(s)	
	10/706,805	BOZAK ET AL.	
	Examiner	Art Unit	
	ABDULLAH AL KAWSAR	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/25/2008 and interview conducted on 11/17/2008.
2. ☒ The allowed claim(s) is/are 1,3,5-7,9,11-17,19-22 are renumbered as claims 1-17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>03/11/2004, 04/23/2004</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Philip J. Hoffmann on 11/17/2008.
3. The following claims had been amended:
 1. A method comprising:
 - receiving a request for a computational resource required to begin computing a first task, the request being provided by a first portion of a network and including a requirement corresponding to computation of the first task;
 - matching the requirement with specifications of computational resources existing in the network;
 - generating a list of matched computational resources having specifications that match the requirement, the matched computational resources being selected from the existing computational resources;
 - responding to the request by sending the list of matched computational resources to the first portion of the network, the list including network addresses relating to the matched computational resources;

receiving a selection from the first portion of the network, the selection including a network address from the list to identify one of the matched computational resources for reservation;

requesting reservation of the identified computational resource, wherein a reservation number is sent to the first portion of the network when the requested reservation is successful;

waiting a predetermined time period for the identified computational resource to begin computing the first task after the requested reservation is successful and the identified computational resource is reserved;

freeing the reserved computational resource for subsequent reservation for computing a second task if the predetermined time period expires and the reserved computational resource has not begun computing the first task; and

sending the request to begin computing the first task to a second matched computational resource included in the list when the requested reservation fails or the predetermined time period expires, wherein the requested reservation fails when the identified computational resource is unavailable to begin computing the first task.

2. (Cancelled).

3. The method of claim 1 wherein sending the reservation number further comprises reserving the identified computational resource by assigning the reservation number to the identified computational resource.

4. (Cancelled).

5. The method of claim 1 wherein matching the requirement further comprises comparing requirements for computing the first task with the specifications.

6. The method of claim 5 wherein generating the list further comprises querying a plurality of portions of the network.

7. A method comprising:

 sending, by a first service, a request for one or more computational resources required to begin computing a first task, the request including a requirement corresponding to computation of the first task;

 responding, by a second service, to the request by matching the requirement with specifications of computational resources existing in the network;

 generating a list of matched computational resources having specifications that match the requirement, the matched computational resources being selected from the existing computational resources;

 sending the list of matched computational resources to the first service, the list including network addresses relating to the matched computational resources;

receiving a selection from the first service, the selection including a network address from the list to identify one of the matched computational resources for reservation;

requesting reservation of the identified computational resource, wherein a reservation number is sent to the first service when the requested reservation is successful;

waiting a predetermined time period for the identified computational resource to begin computing the first task, after the reservation is successful and the identified computational resource is reserved;

releasing the identified computational resource for subsequent reservation for computing a second task if the predetermined time period is over and the reserved computational resource has not begun computing the first task; and

sending the request to begin computing the first task to a third service corresponding to a second matched computational resource in the list when the requested reservation fails or the predetermined time period is over, wherein the requested reservation fails when the identified computational resource is unavailable to begin computing the first task.

8. (Cancelled).

9. The method of claim 7 wherein sending the reservation number further comprises reserving the identified computational resource by assigning the reservation number to the identified computational resource.

10. (Cancelled).

11. The method of claim 7 wherein matching the requirement further comprises comparing requirements for computing the first task with the specifications that are described by information accessible to the first service.

12. The method of claim 7 wherein the second service has a stored relation to the first service.

13. The method of claim 11 wherein the first service executes instructions on a first computer system and computational resources managed by the first service comprise a first set of computational resources located on the first computer system.

14. The method of claim 13 wherein the third service has a stored relation with the first service, the third service executes instructions on a second computer system, and the computational resources that are described by information accessible to the first service further comprise a second set of computational resources that are described by information accessible to the third service.

15. A network comprising:

a first computer system having a first set of one or more computational resources and configured to execute instructions of a first service; and

a second computer system configured to execute instructions of a second service, the first service configured to:

receive, from the second service, a request for a computational resource required to begin computing a first task, the request including a requirement corresponding to computation of the first task;

match the requirement with specifications of computational resources in the first set;

generate a list of matched computational resources having specifications that match the requirement, the matched computational resources being selected from the first set;

respond to the request by sending the list of matched computational resources to the second service, the list including network addresses relating to the matched computational resources;

receive a selection from the second service, the selection including a network address from the list to identify one of the matched computational resources for reservation;

request reservation of the identified computational resource, wherein a reservation number is sent to the second service when the requested reservation is successful;

wait a predetermined time period for the identified computational resource to begin computing the first task, after the reservation is successful and the identified computational resource is reserved;

free the reserved computational resource for subsequent reservation for computing a second task if the predetermined time period is over and the reserved computational resource has not begun computing the first task; and

send the request to a second matched computational resource included in the list when the requested reservation fails or the predetermined time period is over, wherein the requested reservation fails when the identified computational resource is unavailable to begin computing the first task.

16. The network of claim 15 further comprising:

a third computer system having a second set of one or more computational resources and configured to execute instructions of a third service, the third service having a stored relation to the first service;

wherein the first service is further configured to collect information on the second set of one or more computational resources and the list further comprises a subset of the second set of the one or more computational resources.

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17. The network of claim 15 wherein the first service is configured to reserve the identified computational resource by assigning the reservation number to the identified computational resource.

18. (Cancelled).

19. The network of claim 15 wherein matching the requirement further comprises comparing requirements for computing the first task with specifications of computational resources from the first and second sets.

20. The network of claim 15 wherein the second service has a stored relation to the first service.

21. The method of claim 1 wherein the requested reservation is successful when the identified computational resource is available to begin computing the first task.

22. The method of claim 7 wherein:

the requested reservation is successful when the identified computational resource is available to begin computing the first task; and

the reservation number is sent to the first service by the second service.

4. Pursuant to MPEP 606.01 the title has been changed to read: -- SYSTEM FOR MATCHING RESOURCE REQUEST THAT FREEING THE RESERVED FIRST RESOURCE AND FORWARDING THE REQUEST TO SECOND RESOURCE IF PREDETERMINED TIME PERIOD EXPIRED --

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH AL KAWSAR whose telephone number is (571)270-3169. The examiner can normally be reached on 7:30am to 5:00pm, EST.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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